



1 Amendments to the claims:

2

3       1. (Currently amended) A simplified "T" interchange design for  
4       an intersection of a four lane expressway with a two lane highway,  
5       said interchange design comprising:

6            a first road surface with traffic moving in a left to right  
7       direction, said first road surface having at least two lanes for  
8       traffic moving in said left to right direction;

9            a second road surface for traffic moving in a right to left  
10      direction, said second road surface having at least two lanes for  
11      traffic moving in said right to left direction;

12          an open space between said first road surface and said second  
13      road surface, said open space substantially forming a median;

14          a third road surface for traffic intending to intersect said  
15      first road surface and said second road surface; said third road  
16      surface having at least one lane for traffic moving toward said  
17      first road surface and said second road surface; said third road  
18      surface having at least one lane for traffic moving away from said  
19      first road surface and said second road surface;

20          a bridge located on said first road surface substantially  
21      where said third road surface intersects said first road surface,  
22      said bridge configured so that vehicles traveling on said first  
23      road surface pass over said bridge, and above said third road  
24      surface; said bridge configured so that vehicles traveling on said  
25      third road surface pass under said bridge, and under said first

1 road surface;

2 whereby a "simplified "T' interchange design " is provided

3 that provides many benefits; most importantly, all the hazardous

4 elements of existing expressway "T" intersections are eliminated,

5 the results will be the elimination of all future serious and

6 fatal accidents; also, the new "T" interchange design will be very

7 safe for vehicles passing through the new interchange from any

8 direction as vehicles are never required to cut across lanes of

9 high speed traffic when making transitions between the two lane

10 highway and the four lane expressway; and any vehicles passing in

11 front of one another would at most be traveling at only a few miles

12 an hour, thus, any accidents would be minor; additionally, "on

13 ramps" and "off ramps" can be provided so that vehicle making

14 transitions are able to get up to speed before merging with high

15 speed traffic; also, the new simplified interchange design will not

16 be confusing for vehicles passing through the interchange from any

17 direction even if the interchange is built on a curving expressway,

18 and the interchange would very inexpensive to build when compared

19 to the cost to build a conventional interchange, as the simplified

20 design for a "T" interchange can built for approximately 20% to

21 25% of the cost of a traditional interstate interchange thereby

22 saving government transportation departments millions of dollars,

23 additionally, the simplified "T" interchange design may only take

24 up 20% to 25% of the space of a conventional expressway freeway

1       interchange, thereby saving money and land for other uses.

2

3       2. (Currently amended) The simplified "T" interchange design  
4       of claim 1 including an —An— exit ramp from said first road  
5       surface connecting onto said third road surface.

6

7       3. (Currently amended) The simplified "T" interchange design  
8       of claim 1 including an —An— exit ramp from said third road  
9       surface connecting onto said first road surface.

10

11       4. (Currently amended) The simplified "T" interchange design  
12       of claim 1 including an —An— exit ramp from said second road  
13       surface onto said median, said exit ramp connecting onto said  
14       third road surface.

15

16       5. (Currently amended) The simplified "T" interchange design  
17       of claim 1 including an —An— on ramp connecting from said third  
18       road surface, passing through —from— said median, and connecting  
19       onto said second road surface.

20

21       6. (Currently amended) A simplified "T" interchange design for  
22       an intersection of a four lane expressway with a two lane highway,  
23       said interchange design comprising:

24            a first road surface with traffic moving in a left to right

1 direction, said first road surface having at least two lanes for  
2 traffic moving in the left to right direction;

3 a second road surface for traffic moving in a right to left  
4 direction, said second road surface having at least two lanes for  
5 traffic moving in the right to left direction;

6 an open space between said first road surface and said second  
7 road surface, said open space substantially forming a median;

8 a third road surface for traffic intending to intersect said  
9 first road surface and said second road surface; said third road  
10 surface having at least one lane for traffic moving toward said  
11 first road surface and said second road surface; said third road  
12 surface having at least one lane for traffic moving away from said  
13 first road surface and said second road surface;

14 a bridge located on said third road surface substantially  
15 where said third road surface intersects said first road surface,  
16 said bridge configured so that vehicles traveling on said first  
17 road surface pass under said bridge, and, under said third road  
18 surface, said bridge configured so that vehicles traveling on said  
19 third road surface pass over said bridge, and over said first road  
20 surface;

21 whereby a "simplified "T' interchange design " is provided  
22 that provides many benefits; most importantly, all the hazardous  
23 elements of existing expressway "T" intersections are eliminated,  
24 the results will be the elimination of all future serious and

1   fatal accidents; also, the new "T" interchange design will be very  
2   safe for vehicles passing through the new interchange from any  
3   direction as vehicles are never required to cut across lanes of  
4   high speed traffic when making transitions between the two lane  
5   highway and the four lane expressway; and any vehicles passing in  
6   front of one another would at most be traveling at only a few miles  
7   an hour, thus, any accidents would be minor; additionally, "on  
8   ramps" and "off ramps" can be provided so that vehicle making  
9   transitions are able to get up to speed before merging with high  
10   speed traffic; also, the new simplified interchange design will not  
11   be confusing for vehicles passing through the interchange from any  
12   direction even if the interchange is built on a curving expressway,  
13   and the interchange would very inexpensive to build when compared  
14   to the cost to build a conventional interchange, as the simplified  
15   design for a "T" interchange can built for approximately 20% to  
16   25% of the cost of a traditional interstate interchange thereby  
17   saving government transportation departments millions of dollars,  
18   additionally, the simplified "T" interchange design may only take  
19   up 20% to 25% of the space of a conventional expressway freeway  
20   interchange, thereby saving money and land for other uses.

21  
22   7. (Currently amended) The simplified "T" interchange design of  
23   claim 6 including an —An— exit ramp from said first road surface  
24   connecting onto said third road surface.

1   8. (Currently amended) The simplified "T" interchange design of  
2   claim 6 including an —An— exit ramp from said third road surface  
3   connecting onto said first road surface.

4

5   9. (Currently amended) The simplified "T" interchange design of  
6   claim 6 including an —An— exit ramp from said second road surface  
7   onto said median , said exit ramp connecting onto said third road  
8   surface.

9

10   10. (Currently amended) The simplified "T" interchange design of  
11   claim 6 including an —An— on ramp connecting from said third road  
12   surface, passing through —from— said median, and connecting onto  
13   said second road surface.

14

15   11. (New) A simplified "T" interchange design for an intersection  
16   of a four lane expressway with a two lane highway, said interchange  
17   design comprising:

18        a first road surface with traffic moving in a left to right  
19   direction, said first road surface having at least two lanes for  
20   traffic moving in said left to right direction,

21        a second road surface for traffic moving in a right to left  
22   direction, said second road surface having at least two lanes for  
23   traffic moving in said right to left direction ,

24        an open space between said first road surface and said second

1 road surface, said open space substantially forming a median;  
2       a third road surface for traffic intending to intersect said  
3 first road surface and said second road surface; said third road  
4 surface having at least one lane for traffic moving toward said  
5 first road surface and said second road surface; said third road  
6 surface having at least one lane for traffic moving away from said  
7 first road surface and said second road surface;

8       a bridge located on said first road surface substantially  
9 where said third road surface intersects said first road surface,  
10 said bridge configured so that vehicles traveling on said first  
11 road surface pass over said bridge, and over said third road  
12 surface; said bridge configured so that vehicles traveling on said  
13 third road surface pass under said bridge, and under said first  
14 road surface;

15       an exit ramp from said second road surface onto said median ,  
16 said exit ramp connecting onto said third road surface;

17       an on ramp connecting from said third road surface, passing  
18 through said median, and connecting onto said second road surface;

19       whereby a "simplified "T' interchange design " is provided  
20 that provides many benefits; most importantly, all the hazardous  
21 elements of existing expressway "T" intersections are eliminated,  
22 the results will be the elimination of all future serious and  
23 fatal accidents; also, the new "T" interchange design will be very  
24 safe for vehicles passing through the new interchange from any

1 direction as vehicles are never required to cut across lanes of  
2 high speed traffic when making transitions between the two lane  
3 highway and the four lane expressway; and any vehicles passing in  
4 front of one another would at most be traveling at only a few miles  
5 an hour, thus, any accidents would be minor; additionally, "on  
6 ramps" and "off ramps" can be provided so that vehicle making  
7 transitions are able to get up to speed before merging with high  
8 speed traffic; also, the new simplified interchange design will not  
9 be confusing for vehicles passing through the interchange from any  
10 direction even if the interchange is built on a curving expressway,  
11 and the interchange would very inexpensive to build when compared  
12 to the cost to build a conventional interchange, as the simplified  
13 design for a "T" interchange can built for approximately 20% to  
14 25% of the cost of a traditional interstate interchange thereby  
15 saving government transportation departments millions of dollars,  
16 additionally, the simplified "T" interchange design may only take  
17 up 20% to 25% of the space of a conventional expressway freeway  
18 interchange, thereby saving money and land for other uses.

19

20 12. (New) The simplified "T" interchange design of claim 11  
21 including an exit ramp from said first road surface connecting onto  
22 said third road surface.

23

24 13. (new) The simplified "T" interchange design of claim 11

1 including an exit ramp from said third road surface connecting onto  
2 said first road surface.

3

4 14. (new) The simplified "T" interchange design of claim 11  
5 including a traffic signal at the end of said third road surface  
6 substantially where said third road surface meets said second road  
7 surface.

8

9 15. (new) The simplified "T" interchange design of claim 11  
10 including a traffic signal at the end of said exit ramp  
11 substantially where said exit ramp from said second road surface  
12 meets said third road surface.

13

14 16. (New) The simplified "T" interchange design of claim 11  
15 including an exit ramp from said first road surface connecting onto  
16 said third road surface; also,

17 including an exit ramp from said third road surface connecting  
18 onto said first road surface; also,

19 including a traffic signal at the end of said third road  
20 surface substantially where said third road surface meets said  
21 second road surface; also,

22 including a traffic signal at the end of said exit ramp  
23 substantially where said exit ramp from said second road surface  
24 meets said third road surface.

1   17. (new) The simplified "T" interchange design of claim 11  
2   including an "up ramp" on said first surface originating at the  
3   ground level of said interchange location, said "up ramp" rising to  
4   meet the top of said bridge; and, a "down ramp" originating at said  
5   top of said bridge, said "down ramp" terminating at said ground  
6   level of said interchange location.

7

8   18. (new) The simplified "T" interchange design of claim 11  
9   wherein said bridge is an arched bridge with Brownstone color &  
10   texture that is similar to native brownstone located Bayfield  
11   County Wisconsin;

12       thereby providing a design that would be very attractive and  
13   could be a land mark and could be referred to as "a gateway" to the  
14   local national park and Apostle Islands; additionally an arched  
15   brownstone bridge could be designed to look as if it were built  
16   hundreds or even a thousand years ago similar to Roman Bridges  
17   built in Europe more than a thousand years ago.

18

19   19. (new) The simplified "T" interchange design of claim 11  
20   wherein said bridge and ramps have a Brownstone color & texture  
21   that is similar to native brownstone located Bayfield County  
22   Wisconsin;

23       thereby providing a design that would be very attractive and  
24   could be a land mark and could be referred to as "a gateway" to the

1 local national park and Apostle Islands.

2

3 20. (new) The simplified "T" interchange design of claim 11  
4 wherein said bridge and ramps have a color & texture that is  
5 similar to native stone wherever said simplified "T" interchange is  
6 built ;

7 thereby providing a design that would be very attractive  
8 wherever said simplified "T" interchange is built.